

WATER QUALITY M E M O R A N D U M

Utah Coal Regulatory Program

June 20, 2012

TO: Internal File

THRU: Steve Christensen, Permit Supervisor SC

FROM: April A. Abate, Environmental Scientist III QQA
7/2/2012

RE: 2011 Fourth Quarter Water Monitoring, Plateau Mining Corporation (PMC),
Willow Creek Mine, C/007/0038, WQ11-04, Task ID #3980

The Willow Creek Mine is in reclamation. The mine portals have been closed and sealed. The disturbed areas around the portals have been regraded and seeded. The most recent surface operations took place in Willow Creek Canyon, about a mile from the junction between U.S. Highway 6 and State Highway 191. The Permittee is currently seeking Phase II Bond Release on 95.40 acres of the Willow Creek permit area received. The MRP requires that all surface water sampling be conducted up through Phase II Bond Release.

There are no ground water sites monitored during the reclamation phase.

1. Were data submitted for all of the MRP required sites? YES ☒ NO ☐

Under the reclamation plan, surface water monitoring is required for sites listed on Table 4.7-2 and shown on Map 15.

Springs- There are no springs monitored during the reclamation phase.

Streams- There are six surface water-monitoring sites:
B3N (Willow Creek above power plant),
B-5 (Price River below processing plant above Willow Creek),
B-6 (Price River above coal processing plant),
B25 (Crandall Canyon Creek),
B26 (lower reach of Crandall Canyon)
B151 (Willow Creek – 3 miles above Willow Creek Mine)

The reclamation sampling water quality list is presented in Section 13, p. 28. Sampling is conducted quarterly. PMC tries to monitor the sites within a two week period from March 15th, June 10th, September 5th and November 30th to attempt to collect data that coincides with first thaw, spring high flow, end of summer low-flow and last sample before freeze-up.

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All required stream sampling locations were monitored for the quarter on December 7 and 15, 2011. No flow was measured in Crandall Canyon Creek samples B-25 and B-26.

Wells- There are no operational monitoring wells.

UPDES- The mine has been reclaimed and as a result, there are no currently active Utah Pollutant Discharge Elimination System (UPDES) monitoring locations at the site.

2. **Were all required parameters reported for each site?** YES ☒ NO ☐
3. **Were any irregularities found in the data?** YES ☒ NO ☐

Surface flows in Willow Creek 314 gallons per minute (gpm) this quarter. No parameters were reported outside of two standard deviations this quarter. Price River samples reported flow at an average of 44,067 gpm. The operator reported that measuring flow from the sample locations was difficult due to ice build up on the river banks.

TDS standards for this reach of the Price River Watershed are set at 1,700 mg/L based on the Utah Administrative Code Rule R317-2. Stream samples during this quarter remain well below this standard ranging between 360-726 mg/L. Dissolved oxygen concentrations averaged 11.75 mg/L, indicative of a healthy level for fish populations.

4. **On what date does the MRP require a five-year resampling of baseline water data.**

Baseline data were collected at the beginning of mining operations for a two-year period; however, routine 5-year sampling is not specified in MRP. The Division recommends baseline water quality parameter sampling at each five-year renewal period.

5. **Based on your review, what further actions, if any, do you recommend?**

None at this time.